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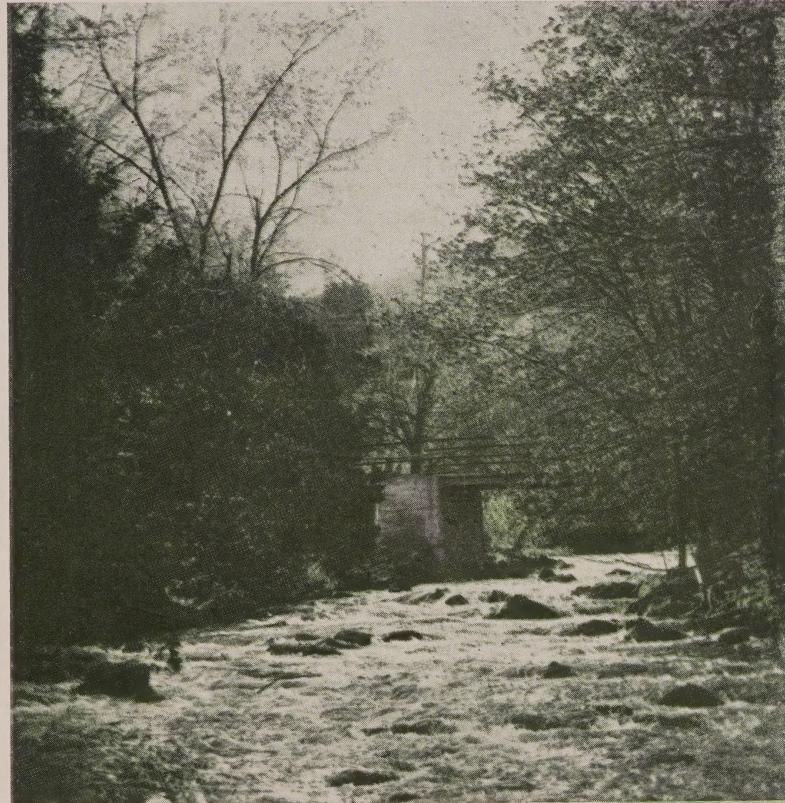
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THE **BULLETIN**

Vol. VI.

No. 3

Hydro-Electric Power
Commission of Ontario
SEPTEMBER
1919



South Branch of the Credit River, Ontario

THE
BULLETIN

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Commission of Ontario**

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SEPTEMBER, 1919



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Editorial

Is Hydro a Success?

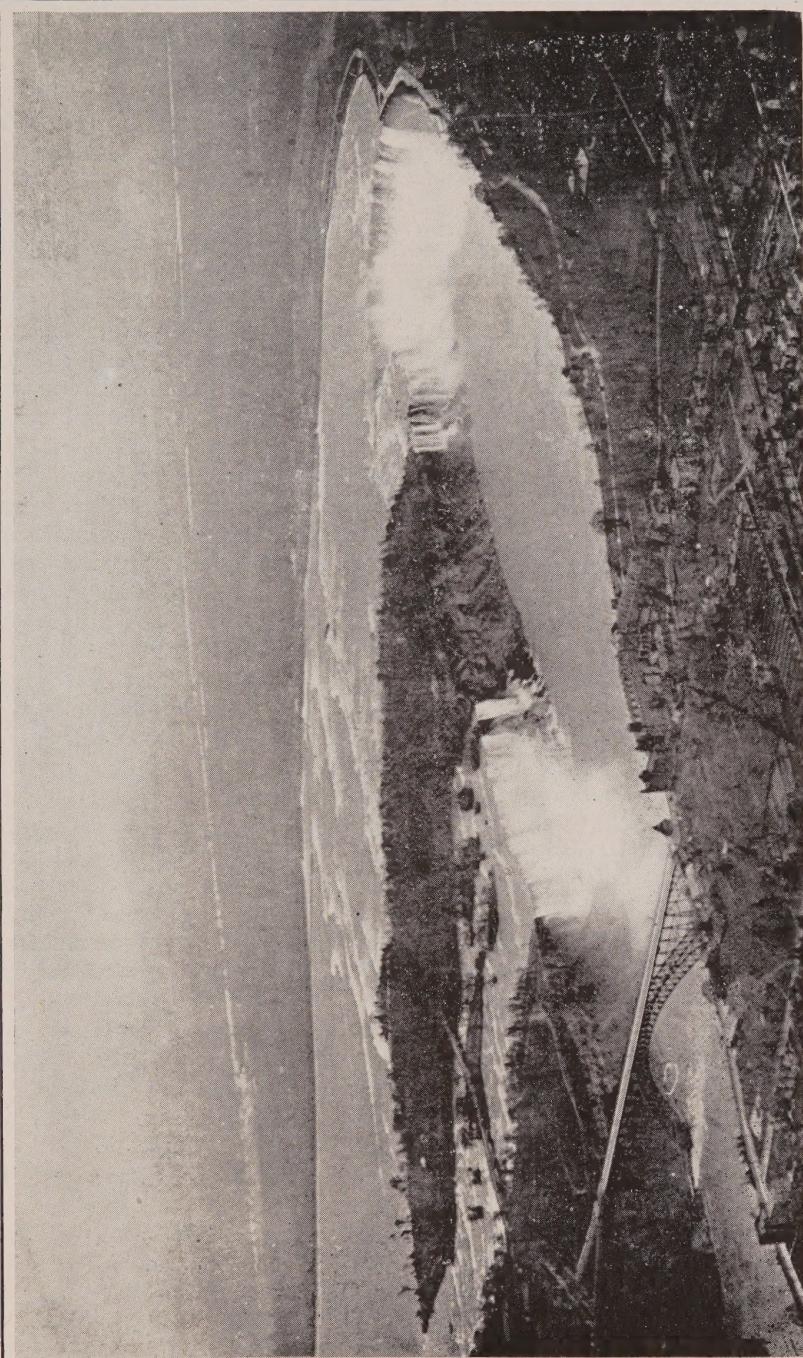
THE latest instance of biased, untruthful criticism of Hydro is well refuted in this issue of THE BULLETIN. Corporation interests, it seems, cannot readily differentiate between the operation of publicly-owned and privately-owned utilities. Could anything more foolish be put forward than the question of Hydro paying taxes? Would it not indeed be carrying coals to Newcastle to charge a higher rate to our customers and pay taxes? Service by and for the people AT COST is an idea which corporationists do not readily grasp, it would seem—and they are rather narrow-minded, to say the least, about giving Hydro any credit for honest, careful management.

Every little while some inspired critic jumps into print and nails Hydro to the oak. But—when these statements are carefully examined they are just as absurd as those of the president of the Commonwealth Edison Company. Just

consider for a moment, if you will, how unjust is the implication that Hydro municipalities should pay for electrical inspection throughout the Province—or hydrographic surveys, which benefit the people of the Province as a whole. It would be just as sensible to ask the Hydro municipalities to pay for the salaries of the members of the Ontario legislature.

Hydro is not organized as a mere central electric power station. It is that, but besides carries on a vast amount of research work, engineering investigations, laboratory work, etc. There is no other public service company anywhere which can command the engineering and scientific talent available on our staff.

To be fair, probably our Chicago critic didn't know about these facts, and this being so, it is our manifest duty to quote his own instructions to him—namely, that before he again gives Hydro an unmerited slur “he should be very sure of his facts.”



General view of Niagara Falls taken from an airplane.—(Wide World Photos)

A Reply to Anti-Hydro Statements

Made by Samuel Insull, President of the Commonwealth Edison Company.

IN the *Electrical World* of July 26, 1919, is an article entitled "Chicago and Ontario Operations Compared," which sets forth certain statements of Samuel Insull, President of the Commonwealth Edison Company of Chicago, regarding the relative states of public and private ownership, with particular reference to the Hydro-Electric Power Commission of Ontario and the Commonwealth Edison Company.

Mr. Insull states that his remarks are in reply to an editorial on "Public Ownership" in the *Chicago Herald and Examiner* of June 30th.

One of Mr. Insull's statements is the following: "I think that writers who discuss the important questions of public versus private operation of public utilities, should be very sure of their facts." This is a sensible observation, but its author evidently uses it here as a piece of good advice for advocates of public ownership, and neglects to perceive that those advocated can justifiably use it as a *tu quoque* argument against himself in respect of some of the very statements which he himself makes.

Mr. Insull says: "According to the Clarkson Report it" (The Hydro-Electric Power Commission) "charged up to the Province at large \$1,117,433 of power general expense which, if included as it should be, would increase the average residence rate by two-thirds of a cent or to 3.78 cents."

The sum of money named is made up of various items as shown in the table on the following page.

The whole of the Commission's undertaking being one of public ownership, is so administered (in accordance with the legal powers assigned to it) that no profits are made; surpluses go back to the municipalities whence they originate, and therefore such items as those tabulated above, not being chargeable to any particular municipality or municipalities, are of necessity charged to the Province.

Mr. Insull, in quoting the Clarkson Report, should have been "very sure of his facts" by reading a little further, and should have the following extract also, as it almost immediately follows the above total and explains matters.

"Of the expenditure so made and charged against the Province, those represented by items (b), (c), (d) and (e) cover services rendered for the Province; items (f), (g), (h), (i) and (j) cover expenditures which, had they not been made by the Commission, would have been incurred by the Government; item (o) represents the cost of equipment, the property of the Province, and the benefit of the expenditures represented by items (a), (k), (l) and (m) must have been received partially or wholly by municipalities. The Commission was empowered to charge those expenditures to the Province. Had they been spread among the municipalities the amount of all the other items would have been increased by the proportion which item (n) bears to the total of the other items."

(a) Engineering assistance and estimates to municipalities not under contract; the gathering of data throughout the Province for statistical purposes; reports on municipal operations, etc. Section 18, Clause 3	\$ 340,449 30
(b) Hydrographic surveys made for the Province. (Sec. 7 and 13.)	\$283,440 32
(c) Niagara Surveys (Sec. 7)	27,796 18
	266,236 50
(d) Investigations and Reports on proposed municipal electrical railway (Hydro-Electric Railway Act)	164,896 07
(e) Department of Public Works.....	9,041 77
(f) Standardizing of municipal station equipment and apparatus (Section 37)	7,421 02
(g) Illuminating engineering investigations (Section 37)	982 38
(h) Inspection and hearing of applications of municipalities for overhead and underground systems ((Section 37)	23,760 85
(i) Rules and Regulations for the installation of systems for the use of electrical energy (Section 37)	27,254 54
(j) Electrical Inspection (Section 37-3)	88,747 34
	148,166 13
(k) Demonstrations at Exhibitions as to the use of electrical energy on farms	25 681 77
(l) Shop and development work on improvement of apparatus, testing instruments, etc.	12,849 18
	38,530 95
(m) Municipal estimates for power rate investigations (Section 36)	12,235 88
(n) Share of executive, administrative and general expenses of Commission as apportioned by it in respect of above and interest upon above expenditures (Sections 3 and 4)	189,381 35
(o) Equipment purchased for hydrographing, demonstrating and other above purposes	10,429 06
	\$1,179,367 01
Less Niagara surveys, etc., charged to the Province in 1908 and since reversed	61,923 15
Total	\$1,117,433 86

It will be seen from the above that a considerable proportion of the expenditure is in any case directly chargeable to the Province—for example, item (f) "Electrical Inspec-

tion," although it is under the jurisdiction of the Commission, is most decidedly chargeable to the Province and not merely to the municipalities which are customers of the Commis-

sion, as it benefits the entire Province. Again in the case of item (b) "Hydro-graphic Surveys made for the Province" there would be no justification for charging this to the municipalities, it is work of the same character as is undertaken, say, by the Department of Mines in regard to mining work, and further there is no fund out of which the expense could be paid since the undertaking is run at cost.

Whenever any item which has been charged to the Province can be shown later to have directly benefited any municipality or group of municipalities, that item is transferred as a charge on it, or them, and this has already been done in a number of instances, and will certainly be done again when opportunity occurs.

Mr. Insull later refers to taxes. This taxation problem is the *pons asinorum* of the men who think solely in terms of private ownership. Why should a publicly-owned public utility be taxed? Is not such taxation merely taking money out of one pocket to put it into another with the added disability that money is spent in doing so? Besides, as a public ownership undertaking is run at cost, if taxes had to be paid the extra money required to pay them would have to come from the people in the form of increased rates for electric energy. The private company is taxed because it is making money out of the people; a public ownership scheme is not taxed because it belongs to the people, and is not making money out of them.

Mr. Insull states that it is not true to say that the opposition to municipal operation of public utilities is based merely on the repeated assertion that "public ownership wherever tried has been a failure," but that on the contrary this opposition is based on

the facts of experience. He then proceeds to give reasons why the rates for electric energy in Ontario are lower than those in Chicago; these reasons so far as they go are perfectly valid, but he neither states nor proves that the work of the Hydro-Electric Power Commission is a failure, he merely leaves it to the imagination that that is what he wishes his readers to infer. It is difficult to see in what way such procedure is better than mere repetition of the assertion quoted above, as it does not really help any one to a conclusion as to whether public ownership is a failure or not. As a matter of fact the question as to the success or failure of the Hydro-Electric Power Commission's undertaking may be readily gauged in two ways, one by the steady progress made, and the other by perusal of the accounts published in the Annual Report of the Commission, and it may be well to state here that the Commission's accounts are now audited monthly by an independent auditor appointed by the Provincial Government at the special request of the Commission itself.

Of course by taking out certain isolated figures and carefully ignoring explanations, one can prove almost anything, but that is neither a fair nor a reasonable way of doing things.

As to the average rates of pay per employee in Ontario and Chicago, to which Mr. Insull refers, no information regarding Chicago rates is available, so that this item cannot be checked; rates of pay have, however, advanced a great deal here during the past five years, probably as much, at least in proportion, as those in Chicago.

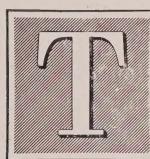
Mr. Insull also takes credit to the Commonwealth Edison Company for not having asked for an increase in

rates in spite of the great increase in the cost of labor, fuel and apparatus—he omits to mention that credit is equally due to the Hydro-Electric Power Commission for the same reason, and that in fact more credit is due to the latter body since actual and

ed in numerous instances in all parts of the Province, wherever the Commission supplies power, in the period since the war commenced, and still the Commission and its work continues to flourish. *Floreat dominium publicum!*

substantial decreases have been grant-

Canada Takes Her Full Rank With the World Nations



HE forward step was taken when her plenipotentiaries signed the treaty of peace at Versailles with those of the world powers. From the time the first British settler came to this country, the possibilities were here of founding and developing a great nation to eventually take its place along with the other great nations of the world. Many weary years have intervened since then, and at times it seemed as if such a thing could never be accomplished. But the faith of the pioneers has been justified, and they "who builded better than they knew" bequeathed to their children a rich heritage—which is now reaching its full fruition.

Its growth has been accelerated, not forced, by the awful hours of agony endured during the last four years of horrible warfare. But that is now a thing of the past, and to-day Canada's sons and daughters, regal in the dignity of their newly acquired Nationhood, stand upon the threshold of a new era.

Whatever may be the national characteristics that eventually will be the chief traits of Canadians, it is of vital importance at this stage of development that habits of thrift should be cultivated by the people. To "teach the young idea how to shoot" is no longer popular or necessary—but to teach the children the true meaning of Thrift—in all its relationships, will be to provide them with an equipment for fighting the battle of life successfully and for developing a sturdy type of character.

With this object in view the Thrift Campaign—by means of War Savings and Thrift Stamps, should find a response everywhere and should receive the cordial support of parents, teachers, and all educational authorities.

Habits, even bad ones, are not acquired in one day. It therefore must not be expected that within the short time the Thrift campaign has been in progress any great impression has been made upon the habits of people. But its continuation upon a permanent basis will bring results of untold value, even unto the "third and fourth generation."



Review of the Technical Press

Electricity in the Household



ACH new convenience placed at our disposal is at first much talked about and highly valued, but its continued use and the arrival of newer objects of interest sooner or later rob it of the attention and appreciation it deserves. At one time, the watch was a possession of which the owner was proud indeed; but to-day it is simply part of our personal paraphernalia, and we consult it without giving conscious thought to the time-piece itself, but only to the object of our interest "the time."

The introduction of such public utility services as city water supply, sewage removal, and gas, electricity and telephone connections have each in turn claimed public interest; and the average householder has progressively found it to his advantage to utilize them, for he cannot produce them himself, or cannot produce them as cheaply, for his own individual use. However, as with most of our other every-day possessions, they have become so familiar to us through their constant utilization in daily activities that we have relegated them to the background of our conscious thought and there unfortunately they usually remain disregarded.

Now that the hostilities of the great conflict in Europe have ceased, and after having been "fed up" on things military, industrial, and maritime, we can with relief turn our attention again to our homes—homes that through the victorious efforts of our allies and ourselves have been saved from the devastation of war.

The four leading articles of this issue have been especially prepared to present the various features which electric service affords in the operation of a home. While, by reason of familiarity, the subject may appear commonplace to some of us who follow the electrical profession, it will be distinctly worth our while to pause and read of the results which have been achieved by those who make it their business to brighten the home and minimize the labor of its maintenance.

There is probably no type of establishment which offers a more varied field of application for electric devices than does the household. It can economically and efficiently utilize the energy of central-station service in the form of light, heat, and power—and also in the production of "cold." Furthermore, its importance is indicated by the amount of its purchase of electrical appliances and electric ser-

vice which, while made up of small individual units, aggregates an enormous total.

The average householder would perhaps be astonished to learn that the company which furnishes his electric service, and which to him is represented only by an office and by a few cables in the street, is but one of some 5,500 similar organizations the investment in which is rated at three billion dollars. This, however, is probably to be expected when it is considered that most of the consumers never see the generating station, since it is located at some distant point. These stations, in the larger of which is sometimes concentrated sufficient power to operate a fleet of eight of the largest and most powerful battleships afloat, supply some fifty million persons with the benefits of electric service and yet are so efficient that their fuel requirements for this service are supplied by less than four per cent. of the total coal consumption of the country.

Electric service was first introduced into the home for the purpose of furnishing an improved illuminant; and, during the years that have followed, experts have placed at our disposal highly efficient incandescent lamps and almost endless varieties of fixtures with which to obtain any desired illumination effect. One of the outstanding problems, however, that remain in the art of applied illumination is the avoidance of glare; and consequently much care must be exercised in the selection of lamps and fixtures to eliminate the cause of this evil.

While the utilization of electricity in the forms of power and heat followed considerably after its introduction for lighting, remarkably rapid progress has been made in the develop-

ment and adoption of domestic electric power and heating appliances, as is amply demonstrated by the two articles on these subjects in this issue.—*General Electric Review.*

Leaves Hydro to Go to China.



Miss Winnifred E. Fifield, who left the employ of the Commission in July to go to China as missionary secretary to Dr. D. MacGillivray. Miss Fifield was employed in the Operating Department for over five years.





WHO'S WHO in HYDRO?

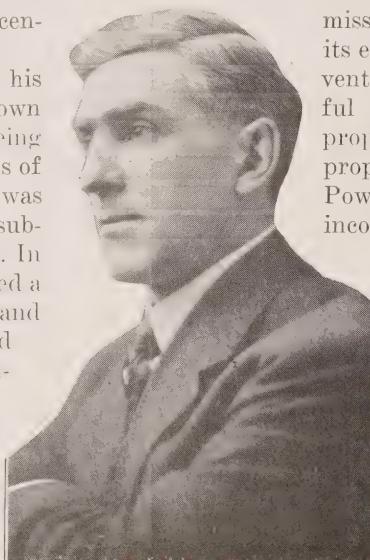


ALTER EBY
REESOR, Local Manager of the Hydro-Electric Power Commission at Lindsay, is a native of Cedar Grove, in the

county of York, and was born in the nineteenth century.

In the early eighties his father moved to the town of Newmarket, and being unable to find sale means of disposing of his child, was compelled to take the subject of this sketch along. In the year 1888 he installed a Ball Arc Dynamo, and thereafter the town and he were properly illuminated. He handed over the management and operation of the plant to his son, who from that moment commenced his electrical career. Under his management the business grew rapidly, and by the end of the year following had made such phenomenal strides that he was obliged to leave the town and the plant, in order to escape the sheriff and to retain freedom of action for the immediate future.

Having made this dignified and successful getaway, W. E. Reesor arrived in Lindsay, and in November, 1889, he helped to install the first electric light in the town. He has been connected with the electric light and power business there ever since.



Beginning with a small steam plant, the business had a steady growth until the company decided to purchase the water power at Fenelon Falls and transmit the energy to Lindsay. This was done in the year 1899, and at that time long distance transmission in Ontario was in its experimental stage. The venture proved a successful one, and in 1911 the proprietor disposed of the property to the Seymour Power Company, which incorporated in its Central Ontario System, Mr. Reesor being the position of local manager.

Five years later, when the Hydro-Electric Power Commission of Ontario took over the property of the Seymour Power Company, the local manager also went over.

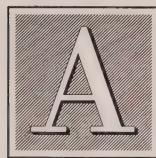
At the present time there is in Lindsay a connected load of nearly 25,000 lights, 150 3-phase motors, and there is not a single steam engine running in the town.

Having so successfully deceived the public, W. E. Reesor became bolder, and one day journeyed to Toronto to try to persuade Miss Emily Mary Miller to marry him. His audacity was rewarded by amazing but not instant success, and Mr. Reesor is to-day the father of two boys.

Hastening the Electrical Age

By W. R. Reynolds

Superintendent, Listowel Public Utilities Commission.



N ideal public utility business, from a Hydro manager's point of view, would be one where every prospect for power and lighting service would be connected and using electricity for every possible use. Will any Hydro municipality ever realize this ideal? I think so—but I do not expect to see the full 100 per cent. of prospects served in any town for some years yet. It is the common experience of plants under municipal ownership to have their list of services constantly growing, but, for a so-called electric age, there is a surprising number of people who are laggards in adopting the all-applicable current to their needs. The inertia of fixed habits is slow to change. At least twenty-five per cent. of the homes in the average town are not wired.

Is there a remedy for this state of affairs? Can anything be done? Should anything be done?

Suppose, Mr. Superintendent, that your commission at its next meeting should pass a resolution something like this: "That the manager be instructed to prepare, within three months, a list of all unwired buildings within the town limits, giving reasons in each case why electric service is not used; and that the manager be further instructed to take immediate action to secure as many as possible of such non-users as consumers."

What would you think of such an order? Would it seem reasonable?

What would you do about it? In the first place do you consider it to be your duty to get all possible business in your municipality—or do you believe that you are doing your full duty if you see that your service is good, your plant kept in good repair and that new services are connected as they come to you?

The writer's opinion is that you should use every effort to add to your load and increase your plant's earnings—as only in this way can your municipality get the lowest possible rates and the full benefits of Hydro power. If this is also your view you may, perhaps, feel like anticipating any such order from your commission and collecting the information for your own satisfaction. I have made such a report—to myself—and used it to such effect in securing new customers that I surprised even myself.

If you wish to make the experiment, get a small indexed card file—cards about 3 by 5 inches—and make up your mind to interview a certain number—say ten—prospects each day. Start out in the morning with a dozen cards in your pocket; conscientiously carry out your schedule and in a very short time you will find that you have gotten together some valuable statistics as to the chances of your plant for future developments—not to mention a much better acquaintance with a lot of people who live in your town and some side lights on human nature as well.

In every case make an estimate of the cost of wiring the house when you

call, and follow up the visit next day with a typewritten letter giving all the details of the estimate. Set forth exactly what you promise to do—the number, location and kind of light and switch outlets—for so much money. Too much emphasis cannot be put on the importance of the estimate to your success. Most people want to know about how much they are getting for their money—some people want to know exactly. Another thing—when you go from room to room in a home discussing the location of the outlets, the style of fixtures best suited to the room, the matter of receptacles for irons, etc., with the lady of the house, you are enlisting what the psychological cranks call suggestive salesmanship to the *'n*th power to help you turn the scale and land the prospect. The typewritten confirmation of the figures given verbally as to the cost of the wiring is most important. When the family council meets, your letter will bring an exact proposition before it. There will be no argument as to whether the light in the spare room is to be on the right of the dresser or on the left—or whether a switch was allowed for on the bathroom light. "There it is in his letter in black and white."

As to the card records. All you need to enter on the cards is—the number of the house or lot number, the name of the householder, the name of the owner, if the occupant is a tenant, particulars of the estimate and the reason why electric service is not used.

You will find that the reasons given you by non-users will run something like this—

1. Will have house wired soon—maybe housecleaning time.

2. Have been thinking about wiring but have not definitely decided yet.
3. Don't own the place.
4. Tenant wants service but landlord won't instal.
5. Don't want electric light.
6. Can't afford to wire house just now anyway.
7. Cost of wiring considered too high.
8. Building not fit to wire—too dilapidated.

Your interviews will most likely produce some immediate results in the way of enquiries and, perhaps a few orders. The estimates are sure to prove interesting to some. The germ of the desire for an electrically lighted home will surely take root here and there. Cultivate it by mailing, or sending out by messenger, liberal doses of those circulars, the makers of irons, toasters, hair dryers, vibrators, etc., use to advertise their wares. Choose your circulars carefully—be sure the ironing matron's picture on the folder looks cool and serene—that the lady making the toast in charming negligee has a smiling morning face—that the expression on the vacuum cleaner maid shows she is having the time of her life.

If your department is not in the wiring business give all the names of prospects one and two to your local wiring contractors and get them busy. If you do wiring try this line of argument to hasten their decision—"Mrs. —, it will pay you to have the home wired now. We have made arrangements to do wiring for the next sixty days at a very low rate—close to cost—to get as many new customers as possible. We have bought the material in large quantities to get low prices. We have several experienced wiremen who do first-class work in

short order. If you miss this special offer, and our men leave town, you will have to take your chance on getting a good job—and you will certainly pay a good deal more. Mrs.— and Mrs. — and Mrs. — are all having their houses done now. We have wired sixty-seven homes within the last two months and have orders right now for nineteen more. When we get through nearly every good home in town will have electric light. Anyway, why should you wait—you might just as well have the comfort of electric light and electric ironing and all the rest right away."

To interest prospects three and four suggest to the tenant that the landlord might wire the home for a little additional rent—say fifty cents or a dollar per month. See the landlord with the same idea and bring the two together. The landlord in a good many cases will spend fifty or seventy-five dollars in wiring for another ten dollars a year. He ought to.

Prospect five is a hard nut to crack. Send him lots of literature. Cultivate his acquaintance and watch your chance. He may weaken. Anyway he may die or move away.

To prospect six propose a very simple installation. Try to arrange installment payments to suit him.

Number seven often has ground for complaint. Find out what estimates he has had and who made them. Check them yourself and use your own estimates. Explain the high cost or suggest simpler arrangement.

Cheaper wiring is a great question.

I remember, when the Hydro enterprise was first launched, hearing speakers declaim something like this—"the power used in the daytime to run the factories will be used again in the homes and stores at night and will cost but little. Newer and cheaper methods of wiring will be developed. The poor man will no longer pay tribute to John D. Rockefeller. Hydro will be the poor man's light." Well Hydro is cheap but wiring is not, on the contrary more expensive methods of installation are in use now than ever before, and many a would-be user still gets his light out of a can because, while he could afford to pay for wiring three or four lights fed through a one-half inch conduit nipple through the kitchen wall, he can't and won't pay for a twenty-foot, three-quarter inch service to the cellar. (Why not make it one inch?)

It may interest those of my readers, who have hung on doggedly thus far, to learn that the council of the town where I tried out the intensive system of business-getting were very well satisfied, indeed, with the results, although they knew nothing of my methods. I heard one of the councillors say at a meeting that he had been told by a travelling salesman that the plant had more consumers for its size than any other plant he knew of. The councillor thought it was doubtless due to the extra large number of citizens who were always ready to go in for improvements. I suppose it never occurred to him to think that some of them had to be pushed in.

ASK THE



HYDRO MAN

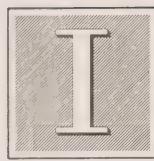
Use this slogan on all your printed matter. Free on application to Publicity Department, Hydro-Electric Power Commission. (Exact Size)



Sales Development

The Value of Show Windows

By C. J. Potter



If the world is a stage as Shakespeare said, then the stage settings are an important feature of every act of life's drama. We must look the part we play and our physical surroundings have a lot to do with the impression created. Therefore, the appearance of a show window has a real commercial value because it has a definite influence in the obtaining and developing of trade.

It is as important to see that the show window is as properly dressed and arranged as it is for a salesman to be properly attired. Appearances can work for us or against us. The show window is the index to the store and the man who has charge of the display work is to a great extent the character builder of that store. In other words, the show window reflects the business policy, character and progressiveness of the retail establishment.

Many retail experts claim that the show window is the most valuable space in the store, therefore, it stands to reason that an improper showing of merchandise means the loss of sales. The show window with the real punch behind it is the one that sells the most

goods at a profit. In order to produce a well-balanced window from a result-producing and advertising standpoint the expense of placing it must be taken into consideration, otherwise the merchant is apt to lessen his profit and thereby decrease the power of the punch.

Windows are for the purpose of selling merchandise. The amount they sell is dependent on the manner in which the merchandise is handled. If the display is pleasing it attracts the passers-by and inspires them to purchase. If show window space is the most valuable space in the store, it is worth all the money, time, and intelligent thought which can be given to it because the best window display is the one which sells the most merchandise.

VALUE OF WINDOWS

It is estimated that from thirty to fifty per cent. of the store's sales are made from the windows; that is, those windows that are properly trimmed. You might be interested to know what value some merchants place upon their show windows. Chas. Stevens & Co. of Chicago, \$150,000 a year; R. H. Macy & Co., New York, \$150,000 a year; Lord & Taylor, New York,

\$100,000 a year; Filenes, Boston, \$506 a day; Saks & Co., New York, \$50,000 a year; Famous & Bar, St. Louis, \$10 to \$25 per day per window, according to size and location; B. Nugent & Bros., St. Louis, \$4 to \$15 per day each, according to size and location.

The thing in which you are most interested is how to get your merchandise properly displayed in the retailers' windows, and in order to give you something definite it would be necessary to divide the stores of this country into two classes.

The first class would consist of department stores, large dry goods stores, and the large men's wear stores. The second class would consist of the small dry goods store, men's clothing stores, hardware, drugs, stationery and grocery stores. The reason for classifying these is that the materials which they use in getting up their displays, the manner and arrangement of merchandise is entirely different.

We will take the large stores first, and I want to say here that in order to get your dealer helps used and secure the co-operation of the display managers of these large stores it is necessary to make a study of the policy adopted by these stores, for the display materials which are acceptable to the smaller stores will not do for the larger stores.

SOLD FOR JUNK.

If you could accompany me to the display manager's office of one of the large stores, you would find just outside of his door one or two four-wheeled trucks. Each night those trucks are taken by the porter to the waste paper baler and you would be surprised to learn that a greater portion of those so-called beautiful display cards, lithographed cutouts, and other things that you prepared, had

never seen daylight, but were going to the waste paper baler to be sold for junk.

The reason for all of this is that the same materials are sent by you to all classes of stores. Supposing that your list of dealers comprise 50 per cent of the larger stores and your plans call for so many thousand lithographed cards. You send this out to your entire list and only 50 per cent. of them are ever used. It is true that you spend time, energy, money and hire some of the best talent in the country to get up these display helps, but the trouble is you do not analyze your dealers.

The display profession has advanced as rapidly as has the advertising profession, and men in charge of the display departments of these large stores receive equal salaries in some instance. Their work is advertising and they have studied those things which go to make window displays effective, the same as advertising men have studied the style of type, the set up, the illustrations and the wording of the written advertisement.

No other profession has changed so materially as that of the display man. Displays arranged ten years ago appear ridiculous when compared with those of to-day. At that time, the man who could pleat, puff and twist cheesecloth in a hundred different ways was considered an expert. A man who could build a house of shirts or soap was considered a genius. However, it did not take long to learn that this was not the most effective style of display.

SIMPLE LINES EFFECTIVE.

In those days, the main idea was to secure a decorative effect, regardless of how it was done. To-day, the merchandise is the first consideration, the decorative background construction

being secondly. The only purpose of a decorative background is to enhance the appearance of the merchandise. Many elaborate backgrounds are failures, as they have a tendency to detract from the appearance of the goods. As a general rule, a background having simple lines is the most effective. It creates a stronger impression on the mind, through the eye, which makes it easy to remember.

The big department stores, men's wear stores, and large dry goods stores will use a greater percentage of the cards which you get out if you will have them made in standardized sizes. There are two sizes of card frames used in store interiors. These are standard and if cards do not fit them they do not find a place in the departments. In those departments where the smaller wares are handled the size of the card should be 11 x 7, the other size 14 x 11.

If you want to make other size cards for the smaller class of stores, well and good, but do not try to make the merchants use something that does not conform to their policy or that does not fit in with the rest of their equipment.

The window sign is another thing, and more manufacturers' window cards find their way to the show window than do the interior cards, and yet it is surprising to learn the number of manufacturers who are sending out window cards that are either all plastered up with the manufacturer's name and his trademark or so highly colored that the display man cannot use them in his windows. Another thing about these cards; do not punch holes in them and send them out as hangers as the larger stores do not hang up cards or any other advertising matter any more.

The large poster cards and reproductions of hand-painted pictures sent out by the large clothing manufacturers are finding considerable favor with nearly all classes of stores. This is because they possess real merit and can be used in connection with clothing displays where such cards would be out of place in the displays of other lines of merchandise.

SMALL GENERAL STORES.

Now let us take class number two, consisting of the smaller general stores. It is this class that manufacturers have been most successful, and this is the class of stores which they can continue to serve even better than they have. The display material for this class of store is entirely different because only a certain per cent. of them have backgrounds in their windows and a very small per cent. have a display man. You, therefore, have an opportunity to present your product in the windows of this class of merchants in a very representative way, but in planning displays of this character try and work out something that is suitable for the various types and sizes of windows.

One of the most successful methods of showing small wares is with the aid of a screen. This screen can consist of three or four wings from four to six feet high with a good solid frame work. Panels can be of wall board and so adjusted that they can be taken out, recovered or repainted. This can serve as a background and by having suitable illustrations, properly located, will serve to tell the merits of your merchandise.

The arrangement depends upon the merchandise used and if you furnish them with the layout it is best to have a model window set up and photographed. Cutouts can also be used

in connection with these screens to excellent advantage but try and get away from the highly lithographed effects, because they are nothing more or less than a decorative feature and in no instance should the fixtures, decorations or show cards dominate the display.

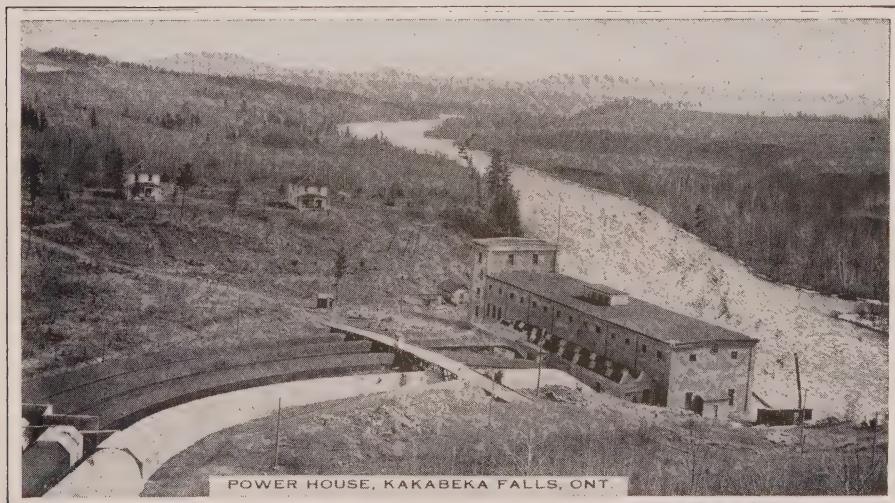
Merchandise is the thing that people are buying. Therefore, the merchandise should always be dominant in the display. Everything else should be subordinated and used as a setting. There are two elements possessed by nearly every object which influences the conscious or subconscious impressions; one is color, the other contour or shape. Every competent display man knows intuitively how to combine colors as to produce the best results. They also have made a special study of the best method of arranging a number of articles to afford a pleasing impression.

Arrangement, therefore, is one of the very important elements in win-

dow displays. The success attained by the professional display man is due to his knowledge of the fundamental principles of arrangement. A lot of merchandise placed in a window in a haphazard way or in piles is unlikely to please by reason of its arrangement. Such arrangements may have a certain appeal because of the cut price of the article, the artistic qualities or real merit of the article fails to appeal because of poor arrangement.

This desire, however, can be aroused by attractive arrangement. Every article possesses shape and the shape is determined by its lines. An analysis of lines shows that those of a certain sort singly or in combination with others invariably please, while others fail to cause any pleasant impression.

You will, therefore, see that it is just as important to have a professional display man design your window display helps as it is to have a good artist paint or draw your illustration.—*Advertising and Selling.*



Lighting Essentials

EFFICIENCY in lighting promotes good work in offices, factories, stores and wherever work is carried on indoors. It improves the quantity and quality of the work turned out, while inefficient lighting is known to be a cause of eye-strain and headache, and thus to be prejudicial to health. It may also be a fruitful source of accidents.

The lighting of buildings must be considered from two aspects. (1) the distribution of daylight admitted through windows and (2) artificial lighting.

As regards daylight, the best method is undoubtedly through skylights, so that all parts of the rooms are lighted about evenly and the light is uniformly diffused. For this reason, many modern factories have been built of only one storey. Owing to high land values and other considerations, such buildings are not always possible. But much can still be done by proper arrangement of work-tables, etc., with relation to the windows. The shadow of the worker's body, head or hands should not be thrown upon his work. Often it may be necessary to supplement the daylight by artificial light which is kept burning all day, but this is a wasteful condition to be avoided wherever possible.

Artificial light has this advantage over daylight, that it is absolutely under our control. One should not imagine that mere brightness or quantity of light constitutes good illumination. On the contrary, a glare is unpleasant and injurious to health. For large areas of work, the light should be overhead and as uniformly diffused as

possible, direct glare being avoided by the use of frosted globes. For example, such lighting would be suitable for warehouses. But for some operations, the light needs rather to be focused on the work, for example, for office work, where usually all that is necessary is a desk-light which illuminates the paper without shining directly into the eyes of the writer.

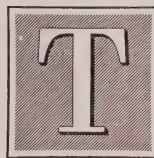
An English author gives the following five tests for good illumination:

1. It must furnish the user sufficient light so that he can see;
2. It must be so placed that it does not cause the user's eyes to change the size of the diaphragm when ordinarily using the light;
3. It must be steady;
4. There shall not be any polished surfaces in its vicinity that will reflect an unnecessary bright spot anywhere that can be seen by the eyes of the worker;
5. It must be protected so that it does not shine in the eyes of some other worker.

The Right Way to Use Electrical Appliances

This is the title of a very useful folder recently published by the National Electric Light Association, 29 West Thirty-ninth street, New York City. The folder gives in concise form a good guide to the successful use of electrical devices in the home, and sounds a warning which, if heeded, will obviate a great deal of inconvenience and trouble on the part of consumers. These folders can be supplied by the association with individual imprints for any public utility.

Heavy Fine for Violation of Commission's Regulations



HERE have been several very serious fires owing to the breakdown of insulation in service conduits, and last December one of these heavy short-circuits occurred in a box manufacturing concern on Dundas street, east, Toronto, which, had it not occurred during the daytime, would have entirely destroyed the building.

The Inspection Department discovered that an irresponsible wireman had wittingly and knowingly pulled some scrap wire into the conduit, which, by the way, was a very large service, the conduit in question being a 2-in. pipe. The result was that the conduit was melted to shreds, the building set on fire, and only through good management and promptness on the part of the fire department saved from total destruction. This work was performed just before the Hydro Commission's Inspection Department commenced operation.

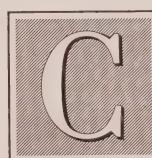
The Inspection Department has been on the still-hunt for violators of this rule, with the result that recently a Toronto wireman was caught red-handed performing the same trick. He was brought before the magistrate, and the following stiff penalty may serve as a warning to people who try to pull over any of this kind of stuff in future. In the first place he was fined fifty dollars and costs for this wilful violation of the Commission's Rules. The magistrate also ordered him to pay forty dollars to

the proprietor of the small institution where the job was performed, owing to the motor being shut down during one day; and the sum of eighteen dollars to another wireman whom the owner had to call in during the emergency to make the necessary repairs.

This may appear to be a very heavy penalty, and no doubt it is but when it is considered that it was a case of wilful—in fact, criminal—negligence, it does not seem any too heavy. The general public have been educated for the past number of years by a misleading and false propaganda. They have been instructed by manufacturers and vendors that they may do almost anything they like with electrical devices; that a key socket is a sort of fountain head for electric current of any quantity or voltage and it is generally supposed that they can handle flexible cords and sockets in basements where it has been shown to be fatal, and there has been a familiarity which breed contempt which it is the duty of the Inspection Department to counteract.



Cause of Grain Elevator Fires



ONSERVATION of food supplies, which has been made prominent during the war, is still essential in view of the urgent demands from the starving nations of Europe. Every possible cause of fires in grain elevators should be studied and safeguarded. A novel

hazard, but one which seems well substantiated, is reported in the following article. It shows that fires can be started by the ignition of dust on incandescent light globes using the old style carbon filaments, and that the remedy is to enclose them with an outer globe. Such lamps usually have a slight loop, sometimes with circular spirals at the end. The tungsten lamp, which is not criticized, has a filament that is laced back and forth. The color of the filament, when cold, is gray, while the carbon filament is black. The *National Underwriter* of Chicago, says:—

"A new grain elevator hazard has been discovered which many feel may be responsible for a number of fires of unknown origin that have occurred in well-filled elevators recently. As it is of first importance to conserve food, underwriters are endeavoring to give the widest publicity to the discovery of this new danger.

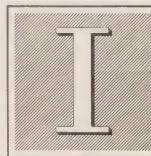
"In a large elevator recently three fires started within five feet of each other, at intervals of one hour. The employee in charge was a man who had been with the company for twenty years and whose record was above reproach. There were various theories concerning the origin of the fires, and it was decided to make a detailed investigation. Detectives were employed to come into the plant and work with the men, and a complete survey was made of the electrical equipment.

"Experiments by electricians developed the fact that the fires were caused by wheat dust collecting on a 16-candle power, 55-volt, ordinary incandescent lamp. The dust ignited from the heat from the globe, fell to the floor and ignited litter lying there.

Further experiments showed that the defect may be entirely corrected by the installation of double globes, or, in other words, encasing an ordinary globe within a thin glass covering. This modifies sufficiently the intensity of the heat, but does not reduce the light.

"The waste matter that accumulates on the floors of elevators storing wheat, oats, barley and other grains is of a highly inflammable nature, and, although the ability of an ordinary incandescent lamp to ignite waste matter of this kind may be doubted by many, the tests conducted at this particular location proved conclusively that the hazard exists and must be reckoned with, although it can be eliminated as outlined."—From a leaflet issued by Committee on Publicity and Education, Chicago.

Who Am I ?



am more powerful than the combined armies of the world.

I am more deadly than bullets, and I have wrecked more homes than the mightiest of siege guns.

I steal in the United States alone \$300,000,000 each year.

I spare no one, and find my victims among the rich and the poor alike; the young and the old; the strong and the weak; widows and orphans know me.

I massacre thousands upon thousands of wage earners in a year.

I lurk in unseen places, and do most of my work silently. You are warned against me, but you heed not.

I am relentless. I am everywhere; in the home, on the street, in the factory, at railroad crossings, and on the sea.

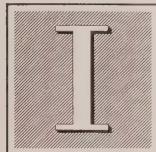
I bring sickness, degradation, and death, and yet few seek to avoid me.

I destroy, crush, and maim; I give nothing, but take all.

I am your worst enemy.

I Am Carelessness!

And Who Am I?



AM the Twin of Carelessness.

I am the evasive, stealthy, slinking creature of an idle or wandering brain.

I maim, when you are off your guard.

I kill the unsuspecting.

I destroy to-day while your thoughts are on to-morrow.

I despoiled almost 150,000,000 days of lost time last year.

I helped to usher in death for, or permanently disable 25,000 persons in 1918.

I aided in seriously maiming 500,000 unsuspecting individuals last year.

I helped to inflict slight injuries upon a million more last year.

I am as highly expensive as my twin.

I bring sorrow to widows and dependents.

I am evasive of all mechanical safeguards.

I slip by the network of safety lines.

I lurk in unclasped body belts; I linger in upturned nails; I hide in half-finished jobs.

I helped to write the Accident Statistics shown on this page— my taint is in every figure.

I am crushed by the alertness of the progressive.

I am daunted by the constant vigilance which is the price of Safety.

I am in fear of the true practice of Safety and Carefulness.

I Am Thoughtlessness!

—Pep.

Discipline



HEN an officer in the army gives a command, he takes it for granted that it will be obeyed. He doesn't have to ask if the individual can find time

to do it, or if he is feeling well to-day, or if he was out late last night, or if he is "all tied up on something else." Neither does the officer have to send a couple of letters to remind the individual of the task assigned or a book of instructions on how to do the job.

That's discipline. And it's a good thing. A fine state of affairs it would be if orders in the army were given, only to find later that the person "forgot about it." Knowing that his orders will be obeyed enables an officer to plan ahead effectively and to handle emergencies with assurance. He doesn't have to worry that some man will fall down on his part of the job and throw the whole machine out of gear.

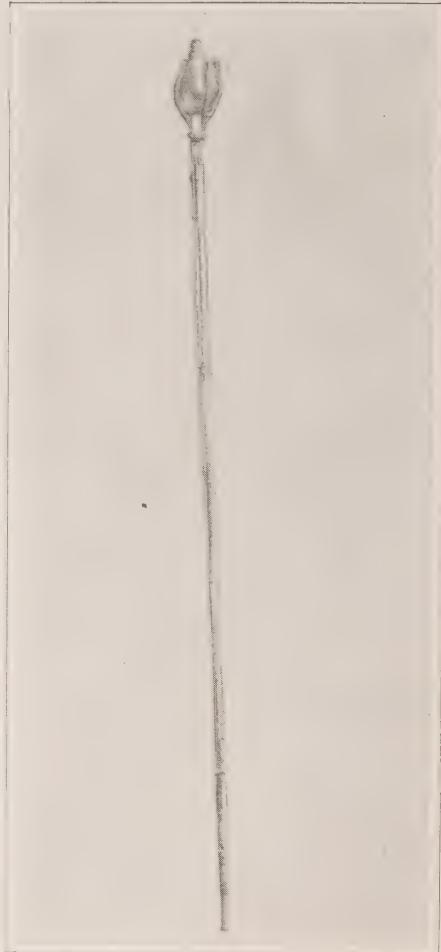
In the army this discipline is imposed by the necessity of having a machine that will respond readily, for the emergencies of war do not give time for the gradual weeding out of the inefficient or the continual straightening out of kinks. It's strictly up to each individual to make himself efficient and to see that kinks do not occur. When discipline goes to

pieces, wholesale disorganization commences. The Bolsheviks of Russia is a glaring example.

In civil life it is impossible to impose such rigid discipline as prevails in the army, and in many ways undesirable. An executive can give an order, but he is not sure it will be carried out. If the individual to whom the order is given is a disciplined individual, the chances are that it will be executed. Naturally, executives like to surround themselves with disciplined—which is another word for trained—individuals.

Now, from what source is this discipline to come? From the top, as in the army? No. It must come from the individual. It must be self-discipline. And the more rigidly imposed and enforced the discipline, the more valuable will be the individual, always supposing the discipline is mixed with brains.

The ability to take orders and carry them out intelligently is one of the things a man should have before he can reasonably expect to give orders.—*The Transmitter.*



Ingenious Lamp Changer

W. R. Catton, Superintendent of the Brantford Hydro-Electric System has sent to THE BULLETIN the accompanying picture of a lamp changer which he devised. In describing this handy accessory for the benefit of our readers Mr. Catton says, "I don't know as there is very much to say regarding this appliance except that it is very simple. This one is

four years old, and has never been out of order. The pole costs 15 cents, the rod is wire from an extension ladder, the grips are stands of steel guy wire wound with tape, the tightening ring is No. 00 copper, and I don't know where we got the screw eyes." Mr. Catton says that his home made lamp changer has changed hundreds of lamps without any maintenance.

NOTICE TO SCHOOL CHILDREN

This letter was recently sent to school teachers throughout the Province with a request that it be read to the pupils. It is part of the Commission's Safety First" campaign.

Some days ago a schoolboy, while playing on the street, picked up an electric light wire. It seemed quite harmless, but he was instantly killed. During the last few years many lads have been killed by climbing poles and trees and touching wires.

The wires that you see support the poles along the streets and roads all carry electricity, very often at great pressure (or, as it is called, "voltage") when it is very deadly. These wires are always dangerous, and should never be touched under any circumstances.

Be careful to remember the following things:

1. Do not touch fallen or hanging wires.
2. Do not climb poles or towers.
3. Do not climb trees through which the wires pass.
4. Do not touch or shake guy wires.
5. Do not throw stones at the insulators.
6. Do not fly kites across the wires.
7. Do not stand below men working overhead.
8. If you see a wire down, report it.
9. Keep away from switching towers, sub-stations and power houses.

TO THE TEACHER:

Will you kindly read the above to your class?

HYDRO-ELECTRIC POWER COMMISSION
OF ONTARIO.



ydro Municipalities

NIAGARA SYSTEM
25 Cycles

NIAGARA SYSTEM		Pop.	Pop.	MUSKOKA SYSTEM	
25 Cycles		Pop.	Pop.	60 Cycles	
Acton	1,570	Port Credit	1,179	Gravenhurst	1,600
Ailsa Craig	462	Port Dalhousie	1,318	Huntsville	2,135
Ancaster	400	Port Stanley	831		Total 3,735
Ancaster Township	4,577	Preston	4,949		
Aylmer	2,119	Princeton	600		
Ayr	780	Ridgeway	2,080		
Baden	710	Rockwood	650		
Barton Township	6,061	Rodney	626		
Beachville	503	Sandwich	3,077		
Biddulph Township	1,750	Sarnia	12,323		
Blenheim	1,257	Scarborough Township	5,525		
Bolton	727	Seaford	2,075		
Bothwell	695	Simcoe	4,032		
Brampton	4,023	Springfield	422		
Brantford	26,601	St. Catharines	17,917		
Brantford Township	7,739	St. George	600		
Breslau	500	St. Jacobs	400		
Bridgen	400	St. Mary's	3,960		
Burford	700	St. Thomas	17,216		
Burford Township	3,882	Stratford	3,418		
Burgessville	300	Streetsville	17,371		
Caledonia	1,236	Tavistock	2,816		
Chatham	13,943	Thamesford	504		
Chippewa	707	Thamesville	742		
Clinton	1,981	Thorndale	250		
Comber	800	Tilbury	1,605		
Dashwood	350	Tillsonburg	3,059		
Delaware	350	Toronto	460,526		
Dereham Township	3,176	Toronto Township	5,008		
Dorchester	400	Townsend Township	3,268		
Dorchester S. Ty.	1,457	Vaughan Township	4,059		
Drayton	613	Walkerville	5,349		
Dresden	1,403	Wallaceburg	4,107		
Drumbo	400	Waterdown	696		
Dublin	218	Waterford	1,027		
Dundas	4,834	Waterloo	5,091		
Dunnville	3,286	Waterloo Township	6,538		
Dutton	840	Watford	1,115		
Elmira	2,065	Welland	7,905		
Elora	1,005	West Lorne	708		
Embroy	472	Wellesley	583		
Etobicoke Township	5,822	Weston	2,283		
Exeter	1,504	Windsor	26,524		
Fergus	1,679	Woodbridge	615		
Flamborough E. Tp.	2,229	Woodstock	10,004		
Forest	1,421	Wyoming	526		
Galt	11,920	Zurich	450		
Georgetown	1,654	Total 1,060,915			
Goderich	4,553	SEVERN SYSTEM			
Grantham Township	3,133	60 Cycles			
Granton	300	Alliston	1,237		
Guelph	16,022	Beeton	6,866		
Hagersville	1,053	Bradford	588		
Hamilton	104,491	Coldwater	946		
Harriston	1,563	Collingwood	617		
Hensall	717	Cookstown	7,010		
Hespeler	2,887	Creemore	635		
Highgate	427	Elmvale	599		
Inversoll	5,300	Midland	775		
Kitchener	19,380	Orillia	7,109		
Lambeth	350	Penetang	7,448		
Listowel	2,291	Port McNichol	3,672		
London	57,301	Staunton	500		
London Township	6,024	Thornton	990		
Louth Township	2,212	Tottenham	250		
Lucan	643	Victoria Harbor	557		
Lynden	662	Waubaushene	1,542		
Markham	909		600		
Merriton	1,670	Total 41,941			
Milton	1,947	WASDELL'S SYSTEM			
Milverton	929	60 Cycles			
Mimico	2,004	Beaverton	821		
Mitchell	1,656	Brechin	215		
Moorefield	335	Cannington	746		
Mount Brydges	500	Sunderland	570		
New Hamburg	1,398	Woodville	357		
New Toronto	1,423				
Niagara Falls	11,715	Total 2,709			
Niagara-on-the-Lake	1,318	NIPISSING SYSTEM			
Norwich	1,093	60 Cycles			
Norwich N. Township	2,029	Callander	650		
Norwich S. Township	1,907	Nipissing	400		
Oil Springs	537	North Bay	9,651		
Ottawaville	500	Powassan	572		
Palmerston	1,843				
Pax	4,437	Total 11,273			
Pelota	3,047	Total 9.181			
Pleasantville	550				
Poli Edward	937				
Total		MUSKOKA SYSTEM			
60 Cycles		60 Cycles			
Alton		Artemesia Township	700		
Arthur		Chatsworth	2,396		
Chesley		Dundalk	1,003		
Durham		Elmwood	2,286		
Flesherton		Grand Valley	1,860		
Hanover		Holstein	750		
Holstein		Hornings Mills	285		
Markdale		Mount Forest	904		
Neustadt		Orangeville	1,871		
Owen Sound		Owen Sound	470		
Shelburne		Shelburne	2,388		
Tara		Tara	1,018		
			620		
			Total 33,057		
OTTAWA SYSTEM		OTTAWA SYSTEM			
60 Cycles		60 Cycles			
Ottawa		Ottawa	100,561		
PORT ARTHUR SYSTEM		PORT ARTHUR SYSTEM			
60 Cycles		60 Cycles			
Port Arthur		Port Arthur	15,224		
CENTRAL ONTARIO SYSTEM		CENTRAL ONTARIO SYSTEM			
60 Cycles		60 Cycles			
Belleville		Bellefontaine	12,080		
Bowmanville		Brighton	3,545		
Brighton		Cobourg	1,278		
Cobourg		Colborne	4,457		
Colborne		Deseronto	811		
Deseronto		Kingston	2,061		
Kingston		Lindsay	22,265		
Lindsay		Madoc	7,752		
Madoc		Millbrook	1,114		
Millbrook		Napanee	2,881		
Napanee		Newburgh	8,812		
Newburgh		Newcastle	444		
Newcastle		Omeme	600		
Omeme		Orono	446		
Orono		Oshawa	700		
Oshawa		Peterboro	8,812		
Peterboro		Port Hope	28,996		
Port Hope		Stirling	4,486		
Stirling		Trenton	823		
Trenton		Tweed	5,169		
Tweed		Whitby	1,350		
Whitby			2,902		
			Total 113,718		
ST. LAWRENCE SYSTEM		ST. LAWRENCE SYSTEM			
60 Cycles		60 Cycles			
Brockville		Brockville	9,473		
Chesterville		Chesterville	868		
Prescott		Prescott	2,630		
Williamsburg		Williamsburg	100		
Winchester		Winchester	1,042		
			Total 14,113		
RIDEAU SYSTEM		RIDEAU SYSTEM			
60 Cycles		60 Cycles			
Perth		Perth	3,358		
Smith's Falls		Smith's Falls	6,115		
			Total 9,473		
ESSEX COUNTY SYSTEM		ESSEX COUNTY SYSTEM			
25 Cycles		25 Cycles			
Amherstburg		Amherstburg	1,990		
Canard River		Canard River	50		
Cottam		Cottam	100		
Essex		Essex	1,429		
Harrow		Harrow	375		
Kingsville		Kingsville	1,633		
Leamington		Leamington	3,604		
			Total 9.181		

THE aim of the
Bulletin is to
provide municipalities
with a source of infor-
mation regarding the
activities of the Com-
mission; to provide a
medium through which
matters of common
interest may be
discussed, and to
promote a spirit of
co-operation between
Hydro Municipalities.